#### PATENT COOPERATION TREATY

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NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II
OF THE PATENT COOPERATION TREATY)

(PCT Rules 44bis.3(c) and 72.2)

#### From the INTERNATIONAL BUREAU

To:

HARMANN, Bernd-Günther Büchel, Kaminski & Partner Patentanwälte Est. Austrasse 79 FL-9490 Vaduz LIECHTENSTEIN

Date of mailing (day/month/year) 08 September 2006 (08.09.2006)	
Applicant's or agent's file reference P-P-5893-WO	IMPORTANT NOTIFICATION
International application No. PCT/EP2004/014089	International filing date (day/month/year) 10 December 2004 (10.12.2004)
Applicant	VIETZ GMBH et al

	l.	Transmittal	of the	translation	to	the applicant
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<b>V</b>	The International Bureau transmits herewith a copy of the English translation of the international preliminary report of patentability (Chapter I).

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

#### 2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

#### None

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume  $\Pi$  of the PCT Applicant's Guide for further details.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

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#### PATENT COOPERATION TREATY

## **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference P-P-5893-WO	FOR FURTHER ACTION	See item 4 helow		
International application No. PCT/EP2004/014089	International filing date (day/month/year) 10 December 2004 (10.12.2004)	Priority date (day/month/year) 10 December 2003 (10.12.2003)		
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237				
Applicant VIETZ GMBH				

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis. 1(a).			
2.	This REPORT consists of a total	of 8 sheets, including this cover sheet.		
	In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.			
3.	This report contains indications	relating to the following items:		
	Box No. I	Basis of the report		
	Box No. II	Priority		
	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability		
	Box No. IV	Lack of unity of invention		
	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
	Box No. VI	Certain documents cited		
	Box No. VII	Certain defects in the international application		
	Box No. VIII	Certain observations on the international application		
4.	The International Bureau will connot, except where the applicant n date (Rule 44bis .2).	mmunicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but nakes an express request under Article 23(2), before the expiration of 30 months from the priority		

	Date of issuance of this report 29 August 2006 (29.08.2006)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Yolaine Cussac
Facsimile No. +41 22 338 82 70	e-mail: ptll@wipo.int

#### PATENT COOPERATION TREATY

From the INTERNATIONA	AL SEARCHING AUTHOR	ITY		MS
То:				PCT PCT
				RITTEN OPINION OF THE IONAL SEARCHING AUTHORITY
				(PCT Rule 43bis.1)
			Date of mailing (day/month/year)	See form PCT/ISA/210
Applicant's or age			FOR FURTHER	ACTION See paragraph 2 below
International appli	ication No. 004/014089	International filing date 10.12.2004	{day/month/year}	Priority date (day/month/year) 10.12.2003
International Pater B23K26/0	nt Classification (IPC) or both	national classification ar	nd IPC	
Applicant VIETZ G	мвн			
2. FURTH  If a det  Internati than this this Inte  If this of written PCT/IS. For furth	Box No. IV Lack of unit Box No. V Reasoned st applicability Box No. VI Certain doc Box No. VII Certain obse  HER ACTION mand for international prelit ional Preliminary Examining s one to be the IPEA and the emational Searching Authority opinion is, as provided above.	opinion  shment of opinion with re ty of invention tatement under Rule 43bis y: citations and explanatio uments cited ects in the international ap ervations on the internatio minary examination is in Authority ("IPEA") exceptosen IPEA has notified y will not be so considered to the a writte priate, with amendments. to of 22 months from the pri A/220.	gard to novelty, invent  (1(a)(i) with regard to (ins supporting such state)  plication  ande, this opinion will  that this does not app the International Bur (insert opinion of the IPEA)  before the expiration	Il be considered to be a written opinion of the ply where the applicant chooses an Authority other eau under Rule 66.1 <i>bis</i> (b) that written opinions of A. the applicant is invited to submit to the IPEA a of 3 months from the date of mailing of Form
Name and mailing	g address of the ISAÆP		Authorized officer	
Facsimile No.			Telephone No.	

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Box	x No. I Basis of this opinion
1.	With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
	This opinion has been established on the basis of a translation from the original language into the following language  , which is the language of a translation furnished for the purposes of international search (under
	Rule 12.3 and 23.1(b)).
2.	With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
	a. type of material
	a sequence listing
	table(s) related to the sequence listing
	b. format of material
	in written format
	in computer readable form
	c. time of filing/furnishing
	contained in the international application as filed.
	filed together with the international application in computer readable form.
	furnished subsequently to this Authority for the purposes of search.
3.	In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filled or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filled or does not go beyond the application as filled, as appropriate, were furnished.
4.	Additional comments:

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Box No. V	Reasoned statement under Rule 43bis. I(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	
I. State		
N	ovelty (N) Claims 1–18 Claims	_ YE:
le	Claims 1-18  Claims	
lr	dustrial applicability (IA)  Claims  Claims	YE:
2. Citat	ions and explanations:	
1	Reference is made to the following document: D1: FR 2 812 227 A (SPIE CAPAG S.A.) 1 February 2002 (2002-02-01)	
2	Document D1 is considered to be the closest prior art. It discloses (the references between parentheses relate to said document):  an orbital welding device with an orbital carriage, a welding head arranged on the orbital carriage and a connecting line according to claim 1,  • the welding unit being formed as a high-power YAG laser beam source, by means of which a laser beam can be generated,  • the connecting line being formed as a light guide for guiding the laser beam to the orbital carriage and  • the welding head being formed as a laser welding head for directing the laser beam into a laser welding zone and for the consequent production of the weld seam,  from which the subject matter of independent claim 1 differs in that:  • the welding unit is formed as a high-power fibre laser beam source instead of a high-power YAG	

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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement

- 2.1 The subject matter of claim 1 is therefore novel (PCT Article 33(2)).
  - The invention is therefore based on the object of providing a device for the orbital welding of pipelines by means of a circumferential weld seam, which has only one layer or fewest possible layers, with which higher welding speeds than in the case of MAG orbital welding, increased process reliability and high weld seam quality can be achieved.
- 2.2 The solution to this problem that is proposed in claim 1 of the present application involves an inventive step (PCT Article 33(3)) for the following reasons:
  - In comparison with a YAG fibre laser source, a high-power fibre laser source allows a higher welding speed and the welding of tubes with fewer layers, and consequently better process reliability and weld quality.
- 2.3 Claims 2-18 are dependent on claim 1 (see Box VIII concerning the dependence of claims 16-18) and therefore likewise meet the PCT requirements for novelty and inventive step.

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Box No. V	1 Certain documents cited			
l. Cert	nin published documents (Rule 43bis.1 and 70.	.10)		
	Application No. Patent No.	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/war)
	racii ivo.	(daymonav <sub>i</sub> car)	(Gayrmonini year)	(any month was)
	•			
See s	supplemental sheet			
2. Non	written disclosures (Rule 43bis.1 and 70.9)			
	Kind of non-written disclosure	Date of non-written disc (day/month/year)		e of written disclosure g to non-written disclosure (day/month/year)
See 1	Form 210			

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Box No. VIII

Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The structure of the dependent claims is such that it makes the application unclear. Claim 16 should be worded as an orbital welding device claim, so that its dependence on orbital welding device claim 15 is clear, and so that it does not appear to be worded as a separate, independent claim of the same category (PCT Article 6). For this reason, claim 16 was interpreted in the search and in this opinion as an orbital welding device according to claim 15.

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient. Continuation of:

#### Box VI

- 1. Reference is made to the following document:
  D2: RU-C-2 229 367 (POPADINETS JURIJ VASIL'EVICH)
  27 May 2004 (2004-05-27)
- 2. It is evident from D2 (see flyleaf, ICIREPAT (43)) that it was published on 20.02.2004.